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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

020995 IM52/0705
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ART UNIT	PAPER NUMBER

1761
DATE MAILED:

07/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

091623,013

Applicant

Examiner

Keith Hendricks

Group Art Unit

1761

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 13-25 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 13-25 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Response to Amendment

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15 and 25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The added term "about", in claims 15 and 25, with regard to the ranges of microns and temperature, respectively, presents new matter not originally found within the specification or claims. For example, original claims 2 and 11 do not possess this term, and the specification does not provide support for a range of numbers outside of "between 300 and 2000 microns", or "between 20 degrees and 45 degrees C". Applicant is required to cancel the new matter in response to this Office action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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The claims read upon multi-cellular microorganisms (and macro-organisms), which may be characterized as "agglomerated particles of fat and enzymes having a mean particle size of at least 250 microns" (claims 13, 15-16). They further comprise proteins (claim 2), and combinations of sugars, organic acids, minerals (claim 17), and may be found with a carrier, such as water. While the preamble of claim 13 states that the composition should be a "bread improver", and in the form of a powder, it is noted that many large-fungi produce spores of this size, which are powders. It is also noted that, while not non-statutory subject matter, *per se*, this reads upon powdered forms of "agglomerated particles" of baker's yeast, for example.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13, 15-16, and 20-21 are indefinite, as it is unclear if the enzymes, or the whole agglomerated particles, are to have the mean particle size of at least 250 microns.

Claim 18 is indefinite, as it is unclear as to what is encompassed by the term "carrier". It is even unclear as to what form of solid, liquid or gas compound this might encompass.

Claims 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is that of forming particles greater than 250 microns, as the last step in the process of claim 20. See, for example, the specification at page 5, and original claim 7. If

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this step were not included, the process yields particles of less than 200 microns, which are not supported by the teachings of the specification.

Claim 21 is indefinite, as the phrase "the starting material", at the end of the claim, does not set forth which starting material, or materials, are included therein. Note that, not only could this be the enzyme and/or the fat, but it also could "comprise" those starting materials, for example, as recited in composition claims 14 and 17.

Claims 22 and 23 should recite "the atomized liquid", to be consistent with claim 20, from which they depend.

Claim 23 is indefinite, as most common polysaccharides and proteins are found as solids, and thus it is unclear as to how these may be "the liquid".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 659 344, of record.

EP '344 discloses dry granular yeast compositions. At page 2 of the reference, it is stated that wetting agents such as fatty acid esters or glycerol esters were known in the art, and that enzymes may be utilized in the dry powder composition with the yeast, resulting "in homogeneous products directly after mixing." At page 3, the reference states that a bread-improving agent is

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adhered or coated on to the dry yeast, and "preferably 50% of the particles will have a size smaller than 50 microns." "The bread-improving agent may preferably comprise one or more enzymes and/or ascorbic acid." "Suitable adhesives are e.g. oils... triglycerides, liquid fats and mixtures thereof." Utilization of a fluidized bed reactor is suggested at page 3, and the outlet temperature of the reactor is stated to be 45 degrees C (page 6). Note that instant claims 20-25 state that the particles should have a mean size of *less than* 200 microns, and that no other steps are involved to produce particles of any other size limitations. Thus, the instant claims are anticipated by the reference.

Claims 13-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Green et al. (US PAT 4,009,076).

Green et al. discloses the production of granules of enzymes, by spray-coating a solid-granule particulate core with liquids. Besides the enzyme, the dry solid, powder granule core "preferably contains a cohesive organic material as [a] binder", such as fatty acids, coconut oil and tallow (col. 3). "The granule core can have a layer of cohesive organic material around its surface, or the solid material carrying the enzyme can be agglomerated with the cohesive organic material to form the core." "The size of an individual granule core will generally be within the range of from 0.05 to 4 mm average diameter", or 50 microns to 4000 microns. At col. 3, the reference states that many enzymes are available in powder form, with inert diluent carriers including starch. Once the core of enzyme and fat is produced, it is then sprayed with the outer "plasticized resin coating", by conventional methods such as in a Lodige mixer, a pan coater, a drum granulator (col. 3, 4), and/or a fluidized bed reactor (examples). In the examples, the enzyme granules were sprayed with an atomized liquid, containing both water and polysaccharides, in a fluidized bed reactor at 40 degrees C.

Thus, the claimed invention is anticipated by Green et al.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (703) 308-2959.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached at (703) 308-3959. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


KEITH HENDRICKS
PRIMARY EXAMINER